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EXAMINER  
CALDWELL, A

ART UNIT	PAPER NUMBER
2758	9

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

See Attached - ATC

# Office Action Summary

Application No.  
08/788,613

Applicant(s)  
Payne et al.

Examiner  
Andrew Caldwell

Group Art Unit  
2758



☒ Responsive to communication(s) filed on Jan 24, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-81 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-50 and 56-81 is/are rejected.

☒ Claim(s) 51-55 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

### **Part III DETAILED ACTION**

#### ***Remarks***

1. Claims 1-81 are presented for examination. This document is the first Office action and is paper number 9 in the file.

#### ***Specification***

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Objections***

3. The claims are objected to under 37 CFR 1.75(f) for failing to be numbered consecutively. There are two claim 9's. The Applicants should submit an amendment that removes text corresponding to the second claim 9 and add new claim 82, corresponding to the second claim 9.

4. Claim 53 is objected to under 37 CFR 1.75(c) as an improper dependent claim since it does not further limit a preceding claim. Claim 53 depends on claim 54. For purposes of prior art rejections in this Office action, claim 53 will be construed as depending on claim 37.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**'958 v. Ammons and '721**

6. Claims 1-3, 14-25, 29-36, 44, 49-50, 60-66, and 78-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCoy et al., U.S. Patent No. 5,790,958, in view of Ammons, B., "RBDS for Your Station!" <http://www.crlsystems.com/crl/tech/rbds.htm>, Circuit Research Labs, Inc., pp. 1-13, Sep. 1995, and May, U.S. Patent No. 5,043,721. In this Office action, any apparatus claim will be discussed before its corresponding method claim, even though the method claims numerically precede the apparatus claims.

**Claims 64-66 and 78-81:**

7. Regarding claim 64, the preamble will be given patentable weight since the claim body refers back to the preamble. McCoy teaches the invention substantially as claimed by disclosing a data transmission system comprising:

- a. Remote computing devices (Fig. 1 elem. 20);
- b. Means for transmitting preprocessed data at said central broadcast server (Fig. 1 elem. 44);
- c. Means for instantaneously notifying said computing devices of receipt of said preprocessed data (Col. 2 lines 51-62).

8. McCoy does not teach a system comprising:
  - a. Means for transmitting data from an information source to a central broadcast server;
  - b. Means for preprocessing said data at said central broadcast server;
  - c. Wherein said remote computing devices are notified of receipt of said preprocessed data whether said computing devices are on or off.
9. Ammons on the other hand discloses a system comprising:
  - a. Means for transmitting data from an information source to a central broadcast server (p. 2 FM radio station transmitter);
  - b. Means for preprocessing said data at said central broadcast server (p. 2 RBDS generator).
10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Ammon's system for preprocessing data from an information server and broadcasting the data to remote computing devices with the radio reception system of McCoy based upon McCoy's explicit teaching that the broadcast signal is encoded and decoded according to the RBDS standard (Col. 1 lines 25-39).
11. May on the other hand teaches means for notifying said computing devices wherein said remote computing devices are notified of receipt of said preprocessed data whether said computing devices are on or off (Fig. 2; Col. 3 lines 61-68).
12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine May's system for waking up the remote computing device upon the

receipt of data with McCoy's remote computing device because it reduces the amount of power consumed by the remote computing.

13. Regarding claim 65, McCoy teaches means for wirelessly transmitting said preprocessed data to remote receivers (Fig. 1).

14. Regarding claim 66, McCoy teaches means for transmitting said preprocessed data using a paging network (Col. 1 lines 58-67; Col. 2 lines 50-62).

15. Regarding claim 78, McCoy teaches a system comprising alert means which when activated allows display of data (Fig. 7 elem. 306).

16. Regarding claim 79, Ammons teaches means for sending data on groups of pooled capcodes (pp. 7-9 nonpublic messages).

17. Regarding claim 80, Ammons teaches means for multiplexing data over multiple capcodes to be reassembled at said user as if data were sent over a single capcode (pp. 7-9 nonpublic messages).

18. Regarding claim 81, Ammons teaches means for assigning, transmitting, receiving, and combining (pp. 7-9 nonpublic messages).

**Claims 1-3, 14-25, 29-36, 44, 49-50, 60-63:**

19. Regarding claims 1-3, 14, and 61-63, they are method claims corresponding to apparatus claims 64-66 and 78-81. Since they do not teach or define above the information in the corresponding apparatus claims, they are rejected under the same basis. The claims correspond as follows: 1 with 64, 2 with 65, 3 with 66, 14 with 78, 61 with 79, 62 with 80, and 63 with 81.

20. Regarding claim 14, McCoy teaches a method comprising providing alert means which when activated allows display of data (Fig. 7 elem. 306).
21. Regarding claim 15, McCoy teaches a method wherein said alert means comprises a visual alert (Fig. 7 elem. 306).
22. Regarding claim 16, McCoy teaches a method wherein said alert means comprises a audio alert (Fig. 7 elem. 306).
23. Regarding claim 17, McCoy teaches a method comprising providing a dockable user interface alert panel on a display communicating with computing device for providing alerts to said user, wherein said alert panel is dockable on top of other applications (Col. 14 line 56 to Col. 15 line 13).
24. Regarding claim 18, McCoy teaches a method comprising displaying fly-in graphics and icon buttons to alert said user that new data has been received by said computing device (Col. 14 line 56 to Col. 15 line 13).
25. Regarding claim 19, McCoy teaches a method wherein said alerts reflect type of information present at computing device (Col. 14 line 56 to Col. 15 line 13).
26. Regarding claim 20, Ammons teaches deriving redundant packets for transmission to said user (p. 7).
27. Regarding claim 21, McCoy teaches parceling a data block into one incoming message, parceling said messages into k packets, and computing a CRC (Fig. 6).
28. Regarding claim 22, McCoy teaches a method wherein packets include information and parity portions (Fig. 2).

29. Regarding claim 23, McCoy teaches a method comprising performing error correction and detection on said code words after said data packets have been parceled (Cols. 10-11).

30. Regarding claim 24, McCoy teaches a method comprising assembling a data block from said code words (Cols. 10-11).

31. Regarding claim 25, McCoy teaches the steps of counting, determining, saving, discarding, and assembling (Cols. 10-12).

32. Regarding claim 29, official notice is hereby taken of the fact that differencing algorithms are well known in the art as a way of compressing data streams in wireless systems.

33. Regarding claim 30, Ammons teaches the step of processing data in accordance with feed type from said information source (pp. 2-4 data groups as feed types).

34. Regarding claim 31, Ammons teaches a method wherein said feed type comprises binary type feeds (p. 2 RBDS signal).

35. Regarding claim 32, McCoy teaches a method wherein said feed type comprises common user information type fields (Col. 2 lines 14-20).

36. Regarding claim 33, Ammons teaches a system wherein said feed type comprises feeds for modifying registry keys which control processing of data (Ammons p. 11 new uses for groups 5, 6, and 7).

37. Regarding claim 34, McCoy teaches a method further comprising the step of using tags to differentiate types of information (Col. 4 lines 29-50).

38. Regarding claim 35, McCoy teaches a method further comprising the step of instantaneously alerting said user to personal alerts through the use of sound, graphics, bit



maps or video, wherein said user can instantaneously access information (Col. 14 line 56 to Col. 15 line 13).

39. Regarding claim 36, McCoy teaches a method further comprising the step of encoding said data with information relating to message parameters for filtering (Col. 14 lines 56-67 paging code as filtering parameter).

40. Regarding claim 44, Ammons teaches the step of modifying said preprocessed data instantaneously and wirelessly (p. 2 adding RBDS subcarrier to FM stereo program).

41. Regarding claim 49, McCoy teaches a method wherein said information source may be an Internet access provider providing data feeds (Col. 2 lines 1-13; Col. 13 line 66 to Col. 14 line 4).

42. Regarding claim 50, McCoy teaches a method wherein said information source may be an on-line service provider providing data feeds (Col. 2 lines 1-13; Col. 13 line 66 to Col. 14 line 4).

43. Regarding claim 60, McCoy teaches a method comprising transmitting said preprocessed data utilizing a FM subcarrier, digital, analog, cellular, GSM or PCS carrier (Col. 2 lines 24-39).

**'958 v. Ammons and '721 and '338**

44. Claims 4-6 and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCoy in view of Ammon and May and Schwob, U.S. Patent No. 5,732,338.

**Claims 67-69:**

45. Regarding claim 67, the combination of McCoy in view of Ammons and Lee teaches the invention substantially as claimed. See section 14 for the rejection of parent claim 65. The combination of McCoy in view of Ammons and Lee does not teach the additional limitation of claim 67. Schwob on the other hand discloses a system wherein preprocessed data is transmitted utilizing a vertical blanking interval (Col. 3 lines 8-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of McCoy in view of Ammons in Lee by substituting Schwob's VBI transmission scheme for the FM subcarrier transmission scheme of the combination. This modification would have been obvious given Schwob's teaching that FM subcarrier and VBI transmission schemes are alternate ways of broadcasting data (Cols. 2-3).

46. Regarding claim 68, Schwob teaches means for transmitting said preprocessed data using a satellite system (Col. 2 lines 56-62).

47. Regarding claim 69, Schwob teaches means for transmitting said preprocessed data to remote receivers by wired transmission (Col. 2 lines 56-62).

**Claims 4-6:**

48. Regarding claims 4-6, they are method claims corresponding to apparatus claims 67-69, respectively. Since they do not teach or define above the information in the corresponding apparatus claims, they are rejected under the same basis.

**'958 v. Ammons and '721 and '338 and '415 and 652**

49. Claims 7-13, 59, and 70-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCoy in view of Ammons and May and Rossman, U.S. Patent No. 5,809,415, and Jacobson, U.S. Patent No. 5,442,652.

**Claims 70-77:**

50. Regarding claim 70, the combination of McCoy in view of Ammons and Lee teaches the invention substantially as claimed. See section 8 for the rejection of parent claim 64.

51. The combination of McCoy in view of Ammons and Lee does not teach the additional limitation of claim 70.

52. Rossman on the other hand discloses a system further comprising means for attaching to said preprocessed data an Internet address location of said preprocessed data (Col. 6).

53. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rossman's system for attaching a resource locator to a paging message with the paging system of the combination of McCoy in view of Ammons and May. This combination would have been obvious because a person of ordinary skill in the art would have recognized that downloading a message including a locator for a much larger object and subsequently retrieving the larger object through a higher bandwidth channel conserves the limited bandwidth of the FM subcarrier channel.

54. Jacobson on the other hand discloses means for providing said user with an automatic connection back to said information source for obtaining further information related to said preprocessed data (Col. 1 lines 23-38 response via dedicated telephone line). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine

the Jacobson's return communication path via telephone line with the paging system of the combination of McCoy in view of Ammons and May. This combination would have been obvious because a person of ordinary skill in the art would have recognized that downloading a message including a locator for a much larger object and subsequently retrieving the larger object through a higher bandwidth channel conserves the limited bandwidth of the FM subcarrier channel.

55. Regarding claim 71, Rossman teaches a system wherein said Internet address location is a URL (Cols. 23 & 38).

56. Regarding claim 72, Rossman teaches means for providing an automatic connection back to said information source through a user activating a single function on said computing device (Cols. 12-13).

57. Regarding claim 73, Rossman teaches a system wherein said single function comprises a single click on said computing device (Cols. 12-13).

58. Regarding claim 74, Jacobson teaches a system wherein said connection back to said information source is an automated wired connection (Col. 1 lines 23-38 response via dedicated telephone line).

59. Regarding claim 75, Rossman teaches a system wherein said connection back to said information source is an automated wireless connection (Cols. 11-14).

60. Regarding claim 76, Rossman teaches means for determining, attaching, transmitting, extracting, and displaying (Cols. 11-14).

61. Regarding claim 77, Rossman teaches means for launching an Internet browser and passing said Internet address location to said browser for automatic connection back to said information source (Cols. 11-14).

**Claims 7-13 and 58-59:**

62. Regarding claims 7-13, they are method claims corresponding to apparatus claims 70-77. Since they do not teach or define above the information in the corresponding apparatus claims, they are rejected under the same basis. The claims correspond as follows: 7 with 70, 8 with 71, 9 with 72, second claim 9 with 73, 10 with 74, 11 with 75, 12 with 76, 13 with 77.

63. Regarding claim 59, the combination of McCoy in view of Ammons and Lee teaches the invention substantially as claimed. See section 8 for the rejection of parent claim 1. The combination of McCoy in view of Ammons and Lee does not teach the additional limitation of claim 58. Rossman on the other hand discloses a method further comprising attaching to said preprocessed data an Internet address location of said preprocessed data for providing to said user a message that causes a process or transaction on said computing device to occur (Cols. 11-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rossman's system for attaching a resource locator to preprocessed data with the system of the combination of McCoy in view of Ammons and May for the reasons given in the rejection of claim 70.

64. Regarding claim 59, Rossman teaches a system wherein said Internet address is a proprietary on-line addressing scheme (Cols. 19-20 network translator).

**'958 v. Ammons and '721 and Beam**

65. Claims 37-43, 45-48, 56-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCoy in view of Ammons and May and Beam, M., "A Summary of Broadcasting Technologies and Potential Applications in Today's Market," [http://www.dungeon.com/~start/rds\\_0030.html](http://www.dungeon.com/~start/rds_0030.html), pp. 1-8, 1994.

**Claims 37-48:**

66. Regarding claim 37, McCoy teaches the invention substantially as claimed. See section 20 for the rejection of claim 1. McCoy does not teach the additional limitations of claim 37.

67. Beam on the other hand discloses a method further comprising the steps of:

- a. Monitoring said transmissions using multiple viewers (p. 6);
- b. Filtering said transmitted preprocessed data (p. 6);
- c. Post processing said preprocessed data (p. 6);
- d. Notifying said user instantaneously of receipt of filtered postprocessed data (p.

6).

68. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Beam's method for delivering multiple services to a personal computer using a broadcast network with the data broadcast system of the combination of McCoy in view of Ammons and May. This combination would have been obvious of McCoy's explicit teaching to configure the radio data reception system to "accommodate a user and access only desired information" (Col. 14 lines 41-44).

69. Regarding claim 38, Beam teaches a method comprising filtering said transmitted preprocessed data in accordance with preferences set by said user (p. 6).

70. Regarding claim 39, Beam teaches a method comprising setting said preferences with respect to sound, video, and animation (p. 6).

71. Regarding claim 40, Beam teaches a method comprising filtering said preprocessed data in accordance with virtual addresses (p. 6).

72. Regarding claim 41, Beam teaches a method comprising filtering said preprocessed data in accordance with physical addresses (p. 6).

73. Regarding claim 42, Beam teaches the step of controlling said viewers from said central broadcast server (p. 6).

74. Regarding claim 43, Beam teaches the step of activating said preprocessed data at a scheduled time (p. 5).

75. Regarding claim 45, Beam teaches the step of activating services wirelessly through activation codes which enable or disable services (p. 6).

76. Regarding claim 46, Beam teaches the step of adding viewers from said central broadcast server (p. 6).

77. Regarding claim 47, Beam teaches the step of removing viewers from said central processing server (p. 6).

78. Regarding claim 48, McCoy teaches the step of recombining, decoding and decompressing said preprocessed data (Cols. 10-12).

79. Regarding claim 56, Beam teaches the step of displaying contextual graphics on said computing device to show data in a predefined format (p. 6).

80. Regarding claim 57, Beam teaches the step of claim 57 wherein said predefined format is a scoreboard (p. 6).

**'958 v. Ammons and '721 and '302**

81. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCoy in view of Ammon and May and Geiger, U.S. Patent No. 5,701,302.

**Claims 26-28:**

82. Regarding claim 26, the combination of McCoy in view of Ammons and Lee teaches the invention substantially as claimed. See section 20 for the rejection of parent claim 1. The combination of McCoy in view of Ammons and Lee does not teach the additional limitation of claim 26. Geiger on the other hand discloses a system combining Huffman compression and the dictionary based compression based algorithms (Cols. 1-2; Col. 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Geiger's apparatus for compressing data with the FM subcarrier data broadcast system of the combination of McCoy in view of Ammons and May so as to transmit compressed data using the transparent data channel. This combination would have been obvious because using compression increases the effective bandwidth of the transparent data channel.

83. Regarding claim 27, Geiger teaches a method further comprising scanning input texts, searching for the next item, searching for the next item in a static Huffman dictionary, and choosing said search method which produces a better compression result (Cols. 5-7).

84. Regarding claim 28, Geiger teaches a method further comprising decompressing said compressed data (Fig. 8).



*Allowable Subject Matter*

85. Claims 51-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


*Conclusion*

86. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Caldwell, whose telephone number is (703) 306-3036. The examiner can normally be reached on M-F from 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by phone fail, the examiner's supervisor, Dr. Parshotam Lall, can be reached at (703) 305-9715. Additionally, the fax phone for Art Unit 2758 is (703) 308-5356.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 305-9600.

Andrew Caldwell  
September 30, 1998

  
PARSHOTAM S. LALL  
SUPERVISORY PATENT EXAMINER